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Dear Cooperator:

FOUR SOIL CONSERVATION DISTRICTS ORGANIZED IN SOUTH DAKOTA

Recent information from the State Soil Conservation Committee indicates that four Soil Conservation Districts have been or are in the process of being created in South Dakota. These districts are situated in eight different counties.

Although actual operations have not started in any of the districts, it is expected that two will start operation in the near future under the State Soil Conservation Districts Law.

A brief summary of these districts follows:

1. TRI-COUNTY DISTRICT - This district is composed of 16 townships in Meade, Ziebach and Perkins counties. The referendum has been held, supervisors elected, and the program of work submitted to Washington and approved. The memorandum of understanding has been signed between the supervisors and the United States Department of Agriculture, which pro-

vides for the furnishing of technical assistance from the Soil Conservation Service in developing the district and individual farm conservation plans. Work is expected to start in March, depending upon the allotment of funds for the district.

2. BROWN-MARSHALL DISTRICT - The second district organized comprises 175,000 acres in Brown and Marshall counties. It is at the present time in the same position as the Tri-County District and should be ready to begin operations in the very near future.

3. BRULE-BUFFALO DISTRICT - This district would be composed of six townships in Brule and Buffalo counties. A number of educational meetings have been held and the hearing to determine the need for the district was conducted by the State Committee on February 5. On February 10 the State Committee after considering evidence presented at the hearing determined there was a need for the district, and set the boundaries. A referendum will be held in the near future.

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4. CLEARFIELD-KEYAPAH DISTRICT - The fourth proposed district is situated in the southwest corner of Tripp County and consists of seven townships. After a series of meetings and considerable work by a temporary committee, the State Committee held a Hearing on February 4, to determine the feasibility and practicality of the district organization.

The State Committee acted favorably on determination of need for this district at their meeting February 10 and set the boundaries to include Wright, Star Prairie, Holsclaw, Kortman, Willow-Creek, Beaver Creek and Huggins townships. A referendum among owners of land in the district will soon be held to decide if a district is to be created.

A petition was received by the State Committee from a group of landowners in Lyman county asking for a Hearing on creation of a proposed Medicine Valley Soil Conservation District comprising 21 townships. A hearing was held at Kennebec, February 4. After considering evidence from the hearing, the State Committee determined on February 10 that conditions did not warrant creation of a district at this time and denied the petition. According to the South Dakota Districts Law, six months must elapse before another petition can be presented from this territory to the State Committee asking for another Hearing on creation of a soil conservation district.

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"Soil lost from the land cannot be returned. Nature can build new soil, but only with the tediousness of centuries. Our problem is to live on the good soil that remains, to defend it as we use it, and to leave it so that succeeding generations may also live upon it. There is no time for regret of past mistakes; we must appraise wisely our opportunities in the use of land and make the most of them."

MANY S. D. FARMERS FOLLOW SOIL CONSERVATION METHODS

Soil conservation methods are being followed in virtually every county in the state, as shown by annual reports submitted by county agents in South Dakota. Some of the work has been done by farmers who are under no agreement to follow Soil Conservation Service recommended practices.

The reports show, for example, that 148 farmers in the state planted crops on the contour and 51 plowed pasture furrows. This information indicates the extent to which farmers who do not reside within erosion control areas are observing and adopting methods developed through cooperation of the Soil Conservation Service and the State Extension Service. Experience in the Soil Conservation Service project and C. C. C. camp areas and on the Extension demonstration farms clearly has shown the practicality of these conservation methods.

The reports of the county agents do not give a complete picture, however; for there probably are a number of farmers not contacted who have followed some conservation practices on their farms.

The following figures show totals for the state, as compiled from available county agent reports:

	No. Farmers	Acres
Proper land use	10	5,000
Using recommended rotations	4,159	307,787
Plowing under green manure	90	1,826
Controlling soil blowing	5,007	528,395
Strip cropping	1,468	127,735
Using cover crops	5,693	454,453
Terraces	24	754
Controlling gullies	32	1,202
Crops on contour	148	8,964
Range contours	51	2,960
Flood water control	4	427

During 1938, the soil and water conservation practices listed above will be followed as well as the additional practices of terracing, dam building, constructing road-side spreader ditches, basin listing, and other improved tillage methods.

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SOIL CONSERVATION NOW FAVORED TOPIC OF DISCUSSION

Soil conservation is a favored topic of discussion at this time due to the fact that the Soil Conservation Service and the Agricultural Conservation Programs have kept this subject before the eyes of the public during the past few years.

Just what is meant by soil conservation is sometimes confusing and a subject open for discussion. Soil conservation does include mechanical and cultural control practices to prevent erosion and to conserve soil and moisture. However, a complete program of conservation goes further than this. It should include as an ultimate goal the establishing of proper sized units and proper land use. Other long-time objectives of soil conservation include the following:

- a. To use the soils as a basis for planning land-use programs to protect and conserve the natural resources of the land.
- b. To supply necessary soils information on maintenance and conservation of the soil resources that will provide security and prosperity to agriculture.
- c. To point the way toward the providing of conditions favorable for a greater security of income.
- d. To train farm leaders in the need and value of soil conservation and maintenance of fertility.
- e. To plan programs for the rehabilitation of badly eroded land that has potential economic value.

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CONSERVATION DEMONSTRATION FARMS EXPERIENCE POPULARITY

Interest of South Dakota farmers in erosion control work being carried out in cooperation with the Soil Conservation Service resulted in the planning of 30 Extension Demonstration farms during 1937 and receipt of applications at the State Office for 18 farms to be put under agreements in 1938.

Extension demonstration farms vary in size from 45 to 1,900 acres. They are scattered from Pennington county in the west to Kingsbury county in the east, and from Bon Homme county in the south to Potter county in the north. They are selected for demonstrations upon recommendations of the county agent and the Extension Soil Conservationist. Field work on the new applications for 1938 will be started in March. Additional applications will be accepted if funds and available technical help permit.

Figures recently compiled in the State Office clearly reveal the type of work carried out in 1937 on the 30 Extension demonstration farms.

Eighteen of the cooperators practiced deferred grazing on 13,130 acres of pasture; 17 cooperators followed recommended crop rotation practices, and 12 others strip cropped 2,592 acres of farmland. Five gully structures were completed, and 9,000 feet of diversion ditches were plowed for water spreading or crop flooding purposes. Recommended woodland practices were followed by two farmers; 22 operators contour tilled on 1,1005 acres of cropland, and 14 ranchers plowed pasture furrows on 919 acres of ranchland.

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Water conservation is an important factor in soil conservation.

ANNUAL REPORT OF SCS CHIEF
SHOWS PROGRESS DURING 1937

Dr. H.H. Bennett, Chief of the Soil Conservation Service, has submitted his report for the fiscal year of 1937. The complete report may be obtained by writing to the Superintendent of Documents at Washington, D. C. The bulletin shows the cooperative relations with other agencies, and the operations, research and administration activities of the Soil Conservation Service.

The following quotations taken from the introduction are of particular interest, due to the fact they deal with the newly created Soil Conservation districts.

"Events of the year allied the individual farmer and the Soil Conservation Service in a new and more effective approach to the problem of conserving soil resources on a national scale.

"In 18 States, legislative action authorizing the formation of soil conservation districts opened for the first time an avenue through which the combined force of individual and governmental initiative can be exerted to the fullest in extending the principles of soil conservation to all of the country's agricultural land. Hitherto, such an avenue has been lacking; there has been no adequate link between the individual land user seeking to conserve his private resource and agencies of Government engaged in the conservation of a resource vital to society and the Nation as a whole. Direct contact between the two has been limited to areas selected for cooperative watershed demonstrations of erosion-control technique; the governmental approach to the whole broad problem of soil-erosion control has been local, consequently, upon the principle of education by demonstration. Now, as a result of State legislation, the soil conservation district emerges as a mech-

anism through which land users of any community may join with the Soil Conservation Service and other governmental agencies in the formulation and execution of conservation plans. The opportunity for cooperative action by these two conservation forces - the land user and Government - thus is broadened out; for the first time it extends not merely into isolated demonstration areas, but to the whole of our farm and grazing lands.

"From the standpoint of national soil husbandry and better land use, the importance of this development cannot be minimized. It establishes in a relatively large number of States the foundation of principle and the framework of democratic procedure upon which a long-time, comprehensive program of soil conservation can be carried out across the vast bulk of our agricultural land.

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NEW BULLETIN "SOIL DISTRICTS FOR
EROSION CONTROL" JUST PUBLISHED

A new bulletin, "Soil Conservation Districts for Erosion Control," has just been published by the Soil Conservation Service. Copies of this bulletin may be procured from your county agent's office.

This publication gives provisions of the Districts Law; shows why cooperative action is necessary; and explains how a district operates. An interesting page in this new bulletin carries the heading, "The Farmer's Partnership With Society." The discussion on this page shows a new concept of the individual farmer's responsibility to society.

Below is reprinted the discussion as it appears in this recent publication.

"IN RECENT YEARS, as a Nation our attitude toward the land has changed. During the years when our farm lands

were being settled the conviction grew that a man's handling of his land could affect only his own wellbeing. Whether he farmed well or whether he farmed poorly, society, it was felt, held no stake in the matter. The roots of the conviction sank deep while there was free land. But since the supply of free land has become exhausted our concept of the relationship of the farmer and rancher to society in general has undergone a change. It has become a matter of public concern. We have taken inventory of our land resources and find that 50 million acres of land have been ruined by erosion and that 100 million acres are approaching ruin as a consequence of improper land use.

"Our new concept assumes that society has an interest in the privately owned farm, forest, and grazing lands of the country which is at least equal to the interest of the owner himself. It recognizes in the soil a basic national resource, which is not only destructible but irreplaceable.

"If this assumption is sound, obviously it imposes new duties on both the landowner and society. It becomes the duty of society to assist the landowner to make the best use of his lands, and it becomes the duty of the landowner so to use his lands as to conserve the soil and its fertility in the interest of society. Only through full cooperation between landowner and society, each recognizing the responsibility and bearing a share of it, can we expect posterity to inherit fertile fields and forests rather than eroded slopes and barren plains."

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Retiring from cultivation all badly eroded submarginal lands and planting them either to grass or timber is an effective means of securing best land utilization.

PROF. J. B. HUTTON SAYS:

(Note: Following are several pointed paragraphs selected from a speech given by Professor J. G. Hutton, South Dakota State College, on "Drought, Dust, and Destitution" at Farm and Home Week, November, 1937.)

"The soils of South Dakota are not as young as they used to be. All of our farms are used farms. Formerly we would have said they are secondhand farms, but that term has fallen into disuse."

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"The Brown County soils exhibit shows that out of an original supply of 1800 pounds of nitrogen in 2 million pounds of soil (and this was a low nitrogen content to start on), 1500 pounds of nitrogen had disappeared; or, rather, that the material which is left in the place of the original soil contains 1500 pounds less of nitrogen than did the original soil. Eighty-six percent of the nitrogen that was once there is now gone, largely because the surface soil has been blown away, leaving the infertile subsoil."

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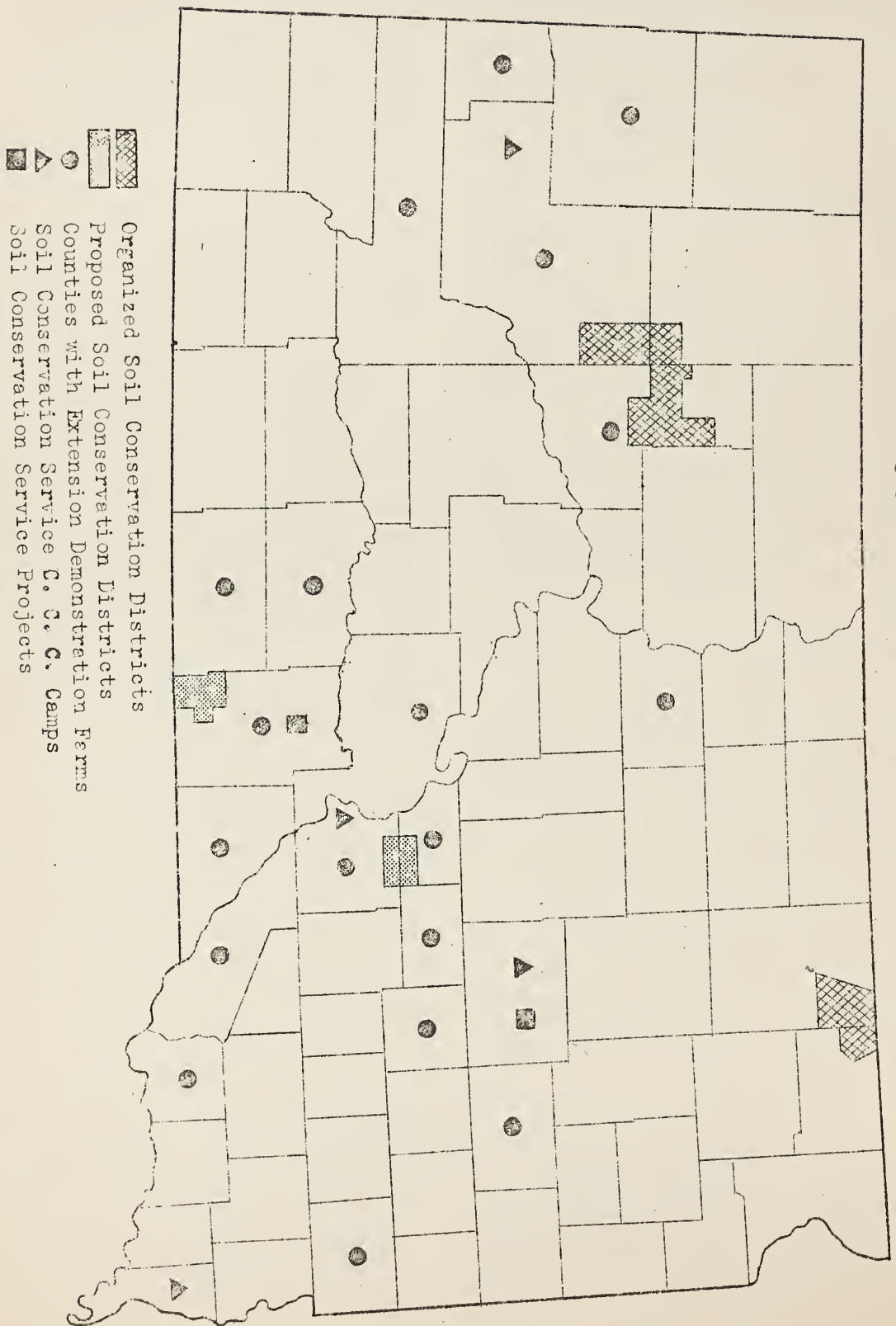
"When we consider that the present trend of farming and the past trend of farming is to make the top soil much like the subsoil, I am sure that we ought all to be concerned with the outcome. Not only should farmers be concerned, but also all people who eat food and wear clothing should be concerned. And all people who are engaged in serving farm lands either by financing or servicing exchange of goods or transportation of goods--they should be concerned. Please bear in mind that the foundation is crumbling and that there is no evidence that anything is being done in any adequate way to prevent the crumbling or to restore the foundation."

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"Programs for Agriculture must be based upon the Soil."

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SOUTH DAKOTA



DO SOIL CONSERVATION METHODS PAY? ? ?

- From Georgia: Land devoted to forest lost only 115 lbs. of soil per acre per year. A bare field lost 112,316 lbs. of soil per acre per year.
- From Texas: Cotton planted up and down hill lost 20% of the rainfall and 52 tons of soil per acre. Cotton planted on the contour lost only 9% of the rainfall and only 5 tons of soil per acre.
- From Iowa: Corn planted up and down hill lost 10% of the rainfall and 40 tons of soil per acre. Corn planted on the contour lost only 0.1% of the rainfall and no soil.
- From Nebraska: A level terrace one-half mile long held 118,500 gallons of water after a 1-inch rain--water that otherwise would have been lost.
- From North Dakota: A small dam constructed in cooperation with the Soil Conservation Service spread water on 42 acres of crop land and produced enough feed for 52 head of stock, besides a family garden.
- From Texas: Corn planted on the contour produced 20 bushels to the acre. Corn planted up and down hill was a complete failure.
- From Kansas: Wheat on the contour yielded 15 bushels per acre and the ground showed a moisture penetration of 57 inches in December. Wheat planted up and down hill was a complete failure and the ground showed a moisture penetration of only 19 inches in December.
- From Nebraska: Forty-two acres of corn on the contour produced 25 bushels per acre. Seventeen acres of corn planted up and down hill yielded only 17 bushels per acre.
- From South Dakota: A field that had produced only 40 bushels of corn on the flat and virtually nothing on the slope, yielded an estimated 80 bushels per acre on the flat and a high tonnage of cane and sweet clover on the hillside when terraced.

UNITED STATES
DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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